

Supplementary Table 1 Characteristics and bibliographic details of studies retrieved through database searches for the systematic review on Hepatitis D virus (HDV) infection

S. No.	Authors	Article Title	Publisher	ISSN	eISSN	ISB N	Journal Abbreviation	Publication Year	Volume	Issue	Start Page	End Page	Article Number	DOI
1	Sonkar, A; Bishwal, SC; Sharma, RK; Barde, PV	Prevalence of Hepatitis D virus antibodies in Hepatitis B patients treated at tertiary care unit at Jabalpur Central India	ELSEVIER	0255-0857	1998-3646		INDIAN J MED MICROBI	2022	40	1	132	134		10.1016/j.ijmmb.2021.11.003
2	Ramachandran, K; Agarwal, R; Sharma, MK; Bhatia, V; Gupta, E	Prevalence of Hepatitis Delta Virus Infection among Hepatitis B Virus-Infected and Exposed Patients	WOLTERS KLUWER MEDKNOW PUBLICATIONS	0974-777X	0974-8245		J GLOB INFECT DIS	2020	12	4	197	201		10.4103/jgid.jgid_137_19
3	Chakraborty, P; Kailash, U; Jain, A; Goyal, R; Gupta, RK; Das, BC; Kar, P	Seroprevalence of hepatitis D virus in patients with hepatitis B virus-related liver diseases	WOLTERS KLUWER MEDKNOW PUBLICATIONS	0971-5916			INDIAN J MED RES	2005	122	3	254	257		
4	Patel, FM; Goswami, PN	Presence of acute hepatitis D infection in HBsAg positive cancer patients: A preliminary study from west Gujarat	MEDKNOW PUBLICATIONS & MEDIA PVT LTD	0971-5916			INDIAN J MED RES	2016	143		798	800		10.4103/0971-5916.192071
5	Irshad, M; Acharya, SK	Hepatitis D virus (HDV) infection in severe forms of liver diseases in north India	RAPID SCIENCE PUBLISHERS	0954-691X			EUR J GASTROEN HEPAT	1996	8	10	995	998		
6	Tandon, BN; Acharya, SK; Tandon, A	Epidemiology of hepatitis B virus infection in India	BRITISH MEDICAL JOURNAL GROUP	0017-5749			GUT	1996	38		S56	S58		10.1136/gut.38.Suppl_2.S56
7	Afzal, S; Ahmad, J; Amin, I; Ali, L; Shahid, M; Khan, MA; Idrees, M	Frequency of Hepatitis D Viral Infection in Chronic Hepatitis B Patients in Pakistan	ZOOLOGICAL SOC PAKISTAN	0030-9923			PAK J ZOOL	2023	55	5	2497	2500		10.17582/journal.pjz/20210930100952
8	Jain, P; Prakash, S; Gupta, S; Singh, KP; Shrivastava, S; Singh, DD; Singh, J; Jain, A	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: A hospital based study	ELSEVIER	0255-0857	1998-3646		INDIAN J MED MICROBI	2013	31	3	261	265		10.4103/0255-0857.115631
9	Zaidi, G; Idrees, M; Malik, FA; Amin, I; Shahid, M; Younas, S; Hussain, R; Awan, Z; Tariq, A; Parveen, K	Prevalence of hepatitis delta virus infection among hepatitis b virus surface antigen positive patients circulating in the largest province of pakistan	BMC		1743-422X		VIROL J	2010	7				283	10.1186/1743-422X-7-283
10	Saravanan, S; Velu, V; Kumarasamy, N; Shankar, EM; Nandakumar, S; Murugavel, KG; Balakrishnan, P; Solomon, S; Thyagarajan, SP	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	OXFORD UNIV PRESS	0035-9203	1878-3503		TROP MED H	2008	102	8	793	796		10.1016/j.trstmh.2008.05.001
11	Butt, FA; Amin, I; Idrees, M; Iqbal, M	Hepatitis delta virus genotype-1 alone cocirculates with hepatitis B virus genotypes A and D in Pakistan	LIPPINCOTT WILLIAMS WILKINS	0954-691X	1473-5687		EUR J GASTROEN HEPAT	2014	26	3	319	324		10.1097/MEG.000000000000007
12	Regmi, K; Shrestha, JK; Sudhamshu, KC; Jaishi, B; Karki, N; Khadka, D; Khadka, S	Prevalence of Hepatitis D Among Patients with Hepatitis B Viral Infection Attending a Tertiary Care Centre of Nepal	NEPAL MEDICAL ASSOC	0028-2715	1815-672X		J NEPAL MED ASSOC	2017	56	208	417	420		10.31729/jnma.3378
13	Murhekar, MV; Murhekar, KM; Arankalle, VA; Sehgal, SC	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India	OXFORD UNIV PRESS	0035-9203	1878-3503		TROP MED H	2005	99	7	483	484		10.1016/j.trstmh.2004.10.002
14	Sagnelli, E; Alessio, L; Sagnelli, C; Gualdieri, L; Pisaturo, M; Minichini, C; Di Caprio, G; Starace, M; Onorato, L; Macera, M; Scotto, G; Coppola, N	Hepatitis B Virus Genotypes, Epidemiological Characteristics, and Clinical Presentation of HBV Chronic Infection in Immigrant Populations Living in Southern Italy	KOWSAR PUBL	1735-143X	1735-3408		HEPAT MON	2017	17	8			e13260	10.5812/hepatmon.13260
15	Aftab, M; Amin, I; Idrees, M; Ali, A; Rafique, S; Naz, S	Molecular epidemiology of hepatitis delta and hepatitis B viruses circulating in two major provinces (East and North-West) of Pakistan	ELSEVIER SCIENCE BV	1567-1348	1567-7257		INFECT GENET EVOL	2018	64		65	69		10.1016/j.meegid.2018.06.013
16	Sagnelli, E; Alessio, L; Sagnelli, C; Gualdieri, L; Pisaturo, M; Minichini, C; Di Caprio, G; Starace, M; Onorato, L; Macera, M; Scotto, G; Coppola, N	Hepatitis B Virus Genotypes, Epidemiological Characteristics and Clinical Presentation of HBV Chronic Infection in Immigrant Populations Living in Southern Italy	KOWSAR PUBL	1735-143X	1735-3408		HEPAT MON	2017	17	9			e13740	10.5812/hepatmon.13740

17	Khan, AU; Waqar, M; Akram, M; Zaib, M; Wasim, M; Ahmad, S; Niaz, Z; Ali, S; Ali, H; Idrees, M; Bajwa, MA	True prevalence of twin HDV-HBV infection in Pakistan: a molecular approach	BMC	1743-422X	VIROL J	2011	8			420	10.1186/1743-422X-8-420
18	Aftab, M; Naz, S; Aftab, B; Ali, A; Rafique, S; Fatima, Z; Inamullah; Idrees, M	Characterization of Hepatitis Delta Virus Among Pregnant Women of Pakistan	MARY ANN LIEBERT, INC	0882 1557-8976 8245	VIRAL IMMUNOL	2019	32	8	335	340	10.1089/vim.2019.0048
19	Jaiswal, SPB; Chitnis, DS; Jain, AK; Inamdar, S; Porwal, A; Jain, SC	Prevalence of hepatitis viruses among multi-transfused homogenous thalassaemia patients	WILEY	1386 1872-034X 6346	HEPATOL RES	2001	19	3	247	253	10.1016/S1386-6346(00)00102-9
20	Thio, CL; Smeaton, L; Saulynas, M; Hwang, H; Saravan, S; Kulkarni, S; Hakim, J; Nyirenda, M; Iqbal, HS; Laloo, UG; Mehta, AS; Hollabaugh, K; Campbell, TB; Lockman, S; Currier, JS	Characterization of HIV-HBV coinfection in a multinational HIV-infected cohort	LIPPINCOTT WILLIAMS & WILKINS	0269 - 9370	AIDS	2013	27	2	191	201	10.1097/QAD.0b013e32835a9984
21	FATHALLA, SES; ABDULAZZIZ, FM; SABRI, HS; AWAD, OA	SEROEPIDEMIOLOGICAL PREVALENCE OF HEPATITIS-DELTA VIRUS IN EASTERN SAUDI-ARABIA	K FAISAL SPEC HOSP RES CENTRE	0256 - 4947	ANN SAUDI MED	1994	14	6	503	506	10.5144/0256-4947.1994.503
22	Moatter, T; Abbas, Z; Shabir, S; Jafri, W	Clinical presentation and genotype of hepatitis delta in Karachi	BAISHIDENG PUBLISHING GROUP INC	1007 2219-2840 9327	WORLD J GASTROENTERO	2007	13	18	2604	2607	10.3748/wjg.v13.i18.2604
23	Abbas, Z; Jafri, W; Raza, S	Hepatitis D: Scenario in the Asia-Pacific region	BAISHIDENG PUBLISHING GROUP INC	1007 2219-2840 9327	WORLD J GASTROENTERO	2010	16	5	554	562	10.3748/wjg.v16.i5.554
24	Riaz, M; Idrees, M; Kanwal, H; Kabir, F	An overview of Triple infection with Hepatitis B, C and D viruses	BIOMED CENTRAL LTD	1743 - 422X	VIROL J	2011	8			368	10.1186/1743-422X-8-368
25	IRSHAD, M; ACHARYA, SK	STATUS OF HEPATITIS VIRAL MARKERS IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASES IN NORTHERN INDIA	KARGER	0300 - 5526	INTERVIROLOGY	1994	37	6	369	372	10.1159/000150404
26	Tan, HY; Yong, YK; Ng, CS; Vimali, J; Mohamed, R; Murugesan, A; Velu, V; Larsson, M; Shankar, EM	Mucosal-Associated Invariant T Cells: Diplomatic Front-Runners in the Fight against Hepatitis B Virus Infection	BEGELL HOUSE INC	1040 2162-6472 8401	CRIT REV IMMUNOL	2021	41	5	1	17	10.1615/CritRevImmunol.2021041408
27	Radhakrishnan, S; Abraham, P; Raghuraman, S; John, GT; Thomas, PP; Jacob, CK; Sridharan, G	Role of molecular techniques in the detection of HBV DNA & HCV RNA among renal transplant recipients in India	INDIAN COUNCIL MEDICAL RES	0971 - 5916	INDIAN J MED RES	2000	111		204	211	
28	THOMAS, PP; SAMUEL, BU; JACOB, CK; JOHN, TJ; SHASTRY, JCM	LOW PREVALENCE OF HEPATITIS-D (DELTA) VIRUS-INFECTION IN A NEPHROLOGY UNIT IN SOUTH-INDIA	ROYAL SOC TROPICAL MEDICINE	0035 - 9203	T ROY SOC TROP MED H	1991	85	5	652	653	10.1016/0035-9203(91)90381-8
29	Amin, I; Rafique, S; Ali, A; Ahmed, N; Shahid, M; Afzal, S; Tahir, S; Waqas, M; Bibi, S; Elgorban, AM; Idrees, M; Shah, MS; Syed, A	Improving Access to Anti-HDV Testing: Development and Validation of an Affordable In-House ELISA Assay	AMER CHEMICAL SOC	2470 - 1343	ACS OMEGA	2024	9	15	17137	17142	10.1021/acsomega.3c09843
30	Ali, L; Idrees, M; Ali, M; Rehman, IU; Hussain, A; Afzal, S; Butt, S; Saleem, S; Munir, S; Badar, S	An overview of treatment response rates to various anti-viral drugs in Pakistani Hepatitis B Virus infected patients	BIOMED CENTRAL LTD	1743 - 422X	VIROL J	2011	8			20	10.1186/1743-422X-8-20
31	Jaiswal, SB; Chitnis, DS; Salgia, P; Sepaha, A; Pandit, CS	Prevalence of hepatitis viruses among chronic renal failure patients on hemodialysis in central India	CREATIVE AGE PUBL	0090 - 2934	DIALYSIS TRANSPLANT	2002	31	4	234	+	
32	SINGH, V; GOENKA, MK; BHASIN, DK; KOCHHAR, R; SINGH, K	A STUDY OF HEPATITIS-DELTA VIRUS-INFECTION IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASE FROM NORTHERN INDIA	BLACKWELL SCIENCE LTD	1352 - 0504	J VIRAL HEPATITIS	1995	2	3	151	154	10.1111/j.1365-2893.1995.tb00021.x
33	Batra, Y; Bhatkal, B; Ojha, B; Kaur, K; Saraya, A; Panda, SK; Acharya, SK	Vaccination against hepatitis A virus may not be required for schoolchildren in northern India: results of a seroepidemiological survey	WORLD HEALTH ORGANIZATION	0042 1564-0604 9686	B WORLD HEALTH ORGAN	2002	80	9	728	731	
34	Guptan, RC; Thakur, V; Sarin, SK; Banerjee, K; Khandekar, P	Frequency and clinical profile of precore and surface hepatitis B mutants in Asian-Indian patients with chronic liver disease	NATURE PUBLISHING GROUP	0002 1572-0241 9270	AM J GASTROENTEROL	1996	91	7	1312	1317	

35	Gupta, V; Arora, R; Saha, A; Dhir, A; Kar, P; Bamezai, R	Novel variations in the signal peptide region of transforming growth factor β 1 gene in patients with hepatitis:: a brief report from India	WILEY	1744	1744-313X	3121	INT IMMUNOGENE T	J 2005	32	2	79	82	10.1111/j.1744-313X.2005.00499.x
36	Irshad, M; Sharma, Y; Dhar, I; Singh, J; Joshi, YK	Transfusion-transmitted virus in association with A-E viral infection in various forms of liver diseases in India	BAISHIDENG PUBLISHING GROUP INC	1007	2219-2840	9327	WORLD GASTROENTEROLOGY	J 2006	12	15	2432	2436	10.3748/wjg.v12.i15.2432
37	Khuroo, MS; Sofi, AA	The Discovery of Hepatitis Viruses: Agents and Disease	ELSEVIER - DIVISION REED ELSEVIER INDIA PVT LTD	0973	2213-3453	6883	J CLIN EXP HEPATOL	2020	10	4	391	401	10.1016/j.jceh.2020.04.006
38	Abraham, P; John, GT; Raghuraman, S; Radhakrishnan, S; Thomas, PP; Jacob, CK; Sridharan, G	GB virus C/hepatitis G virus and TT virus infections among high risk renal transplant recipients in India	ELSEVIER SCIENCE BV	1386	-	6532	J CLIN VIROL	2003	28	1	59	69	PII S1386-6532(02)00239-1 6532(02)00239-1
39	Reuschel, E	Diagnostics and treatment of viral hepatitis in pregnancy	SPRINGER HEIDELBERG	2731	2731-7110	7102	GYNAKOLOGIE	2024	57	8	536	544	10.1007/s00129-024-05256-4
40	Khuroo, MS; Kamili, S	Aetiology, clinical course and outcome of sporadic acute viral hepatitis in pregnancy	BLACKWELL PUBLISHING LTD	1352	-	0504	J VIRAL HEPATITIS	2003	10	1	61	69	10.1046/j.1365-2893.2003.00398.x
41	Dhawan, PS; Desai, HG	Subacute hepatic failure - Diagnosis of exclusion?	LIPPINCOTT WILLIAMS & WILKINS	0192	-	0790	J CLIN GASTROENTEROL	1998	26	2	98	100	10.1097/00004836-199803000-00002
42	Kao, C; Surjit, M; Ranjith-Kumar, CT	Editorial: Viral Hepatitis: Pathophysiology, Prevention, and Control	FRONTIERS MEDIA SA	2235	-	2988	FRONT CELL INFECT MI	2021	11				633580 10.3389/fcimb.2021.633580
43	Jaiswal, SPB; Jain, AK; Naik, G; Soni, N; Chitnis, DS	Viral hepatitis during pregnancy	WILEY	0020	1879-3479	7292	INT J GYNECOL OBSTET	2001	72	2	103	108	10.1016/S0020-7292(00)00264-2
44	Rauff, B; Idrees, M; Shah, SAR; Butt, S; Butt, AM; Ali, L; Hussain, A; Irshad-ur-Rehman; Ali, M	Hepatitis Associated Aplastic Anemia: A review	BMC	1743-422X			VIROL J	2011	8			87	10.1186/1743-422X-8-87

Scopus Search

1	HEPATITIS D												https://doi.org/10.1016/S1089-3261(05)70070-2
2	Comparison of anti-hepatitis D virus (HDV) ETI-AB-DELTA-2 assay and the novel LIAISON® XL MUREX anti-HDV assay in the diagnosis of HDV infection												https://doi.org/10.1016/j.diagmicrobio.2019.114873
3	Worldwide epidemiology of HBV infection, disease burden, and vaccine prevention												https://doi.org/10.1016/S1386-6532(05)00384-7
4	Outcomes of Long-term Treatment of Chronic HBV Infection With Entecavir or Other Agents From a Randomized Trial in 24 Countries												https://doi.org/10.1016/j.cgh.2019.07.010
5	Reduced Expression of DNA Damage Repair Genes High Mobility Group Box1 and Poly(ADP-ribose) Polymerase1 in Inactive Carriers of Hepatitis B Virus Infection-A Possible Stage of Viral Integration												https://doi.org/10.1016/j.jceh.2013.04.003
6	Biochemical Detection of Hepatitis B Virus Constituents												https://doi.org/10.1016/S0065-2423(08)60183-3
7	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India												https://doi.org/10.1016/j.trstmh.2004.10.002
8	Multifaceted Defects in Monocytes in Different Phases of Chronic Hepatitis B Virus Infection: Lack of Restoration after Antiviral Therapy												https://doi.org/10.1128/spectrum.01939-22
9	Estimating the proportion of people with chronic hepatitis B virus infection eligible for hepatitis B antiviral treatment worldwide: a systematic review and meta-analysis												https://doi.org/10.1016/S2468-1253(20)30307-1
10	Hepatitis B virus genotypes : a retrospective survey in Southwestern France, 1999-2004												https://doi.org/10.1016/S0399-8320(07)78341-0
11	Spontaneous loss of surface antigen among adults living with chronic hepatitis B virus infection: a systematic review and pooled meta-analyses												https://doi.org/10.1016/S2468-1253(18)30308-X
12	Hepatitis B virus genetic variability and evolution												https://doi.org/10.1016/j.virusres.2007.02.021

13	High Prevalence of Hepatitis B Subgenotype D4 in Northeast Brazil: an Ancient Relic from African Continent?	https://doi.org/10.5604/01.3001.0010.7535
14	Molecular epidemiology of hepatitis B, C, D and E viruses among children in Moscow, Russia	https://doi.org/10.1016/j.jcv.2003.08.009
15	An epidemic of hepatitis D in the foothills of the Himalayas in South Kashmir	https://doi.org/10.1016/S0168-8278(88)80476-8
16	Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews	https://doi.org/10.1016/S0140-6736(11)61097-0
17	HBV genotypes prevalence, precore and basal core mutants in Morocco	https://doi.org/10.1016/j.meegid.2012.04.026
18	HDV: Thirty years later	https://doi.org/10.1016/S1590-8658(10)60687-1
19	Hepatocellular carcinoma in the developing world	https://doi.org/10.1016/S0093-7754(01)90090-9
20	Molecular epidemiology, phylogenetic analysis and genotype distribution of hepatitis B virus in Saudi Arabia: Predominance of genotype D1	https://doi.org/10.1016/j.meegid.2019.104051
21	Virologic and histologic characterisation of dual hepatitis B and C co-infection in Egyptian patients	https://doi.org/10.1016/j.ajg.2013.11.003
22	CHAPTER 7 - Viral Hepatitis: Expanding the Alphabet	https://doi.org/10.1016/S0065-3101(24)00032-X
23	Prevalence and clinical-epidemiological characteristics of chronic hepatitis due to hepatitis delta virus on Gran Canaria Island	https://doi.org/10.1016/j.jimce.2024.09.006
24	Seroepidemiology of HBV and HCV in India. Strategy for control of maternal transmission of HBV and its effect. Screening methods of blood donors for control of post-transfusion hepatitis and their effects	https://doi.org/10.1016/S0928-4346(96)82005-6
25	Historic and current hepatitis B viral DNA and quantitative HBsAg level are not associated with cirrhosis in non-Asian women with chronic hepatitis B	https://doi.org/10.1016/j.jiid.2014.08.005
26	Inappropriate cessation of nucleos(t)ide analog associated with reduced liver transplant-free survival in patients with HBV-related acute on chronic liver failure	https://doi.org/10.1016/j.biopha.2020.111118
27	Naturally Occurring Variants of Hepatitis B Virus	https://doi.org/10.1016/S0065-3527(08)60298-5
28	Hepatitis delta virus testing, epidemiology and management: A multicentre cross-sectional study of patients in London	https://doi.org/10.1016/j.jcv.2015.02.011
29	INASL Guidelines on Management of Hepatitis B Virus Infection in Patients receiving Chemotherapy, Biologicals, Immunosuppressants, or Corticosteroids	https://doi.org/10.1016/j.jceh.2018.06.010
30	Chronic hepatitis B in adopted Romanian children	https://doi.org/10.1016/S0022-3476(05)81147-3
31	Global, regional, and national burden of hepatitis B, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019	https://doi.org/10.1016/S2468-1253(22)00124-8
32	SEROLOGIC DIAGNOSIS OF VIRAL HEPATITIS****The opinions and assertions contained herein are the private views of the author and are not to be construed as official or as reflecting the views of the Department of the Army or the Department of Defense.****All material in this article is in the public domain with the exception of any borrowed tables or figures.	https://doi.org/10.1016/S0025-7125(05)70474-0
33	The worldwide impact of vaccination on the control and protection of viral hepatitis B	https://doi.org/10.1016/S1590-8658(10)60685-8
34	Level of Hepatitis B Virus DNA in Inactive Carriers With Persistently Normal Levels of Alanine Aminotransferase	https://doi.org/10.1016/j.cgh.2010.03.006
35	KGHeBTA (King George's Medical University Hepatitis B Therapeutic Algorithm): A New Diagnostic and Therapeutic Algorithm and	https://doi.org/10.1016/j.jceh.2023.02.007

	Clinico-epidemiological Spectrum of Hepatitis B	
36	Acute hepatitis B virus infection in Turkey: epidemiology and genotype distribution	https://doi.org/10.1111/j.1469-0691.2004.00871.x
37	Hepatitis B virus: From diagnosis to treatment	https://doi.org/10.1016/j.patbio.2010.05.002
38	Viral Hepatitis in Solid Organ Transplantation	https://doi.org/10.1111/ajt.12108
39	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	https://doi.org/10.1016/j.trstmh.2008.05.001
40	GB virus C/hepatitis G virus and TT virus infections among high risk renal transplant recipients in India	https://doi.org/10.1016/S1386-6532(02)00239-1
41	Alpha-fetoprotein as a tumor marker in hepatocellular carcinoma: investigations in south Indian subjects with hepatotropic virus and aflatoxin etiologies	https://doi.org/10.1016/j.ijid.2008.04.010
42	Epidemiology of HBV infection in Asian blood donors: Emphasis on occult HBV infection and the role of NAT	https://doi.org/10.1016/S1386-6532(06)80007-7
43	Transfusion-Transmitted Hepatitis Virus Infection	https://doi.org/10.1016/S0889-8588(18)30113-8
44	Phylogenetic analysis of hepatitis B virus full-length genomes reveals evidence for a large nosocomial outbreak in Belgium	https://doi.org/10.1016/j.jcv.2009.06.015
45	Global prevalence, cascade of care, and prophylaxis coverage of hepatitis B in 2022: a modelling study	https://doi.org/10.1016/S2468-1253(23)00197-8
46	Comparative expression of pro-inflammatory and apoptotic biosignatures in chronic HBV-infected patients with and without liver cirrhosis	https://doi.org/10.1016/j.micpath.2021.105231
47	Hepatitis in pregnancy	https://doi.org/10.1016/S0146-0005(98)80016-5
48	Hepatitis B in Trans-Himalayan Tribal Population: High Prevalence, High Pediatric Burden, Virologic Patterns, and Implications for Public Health Interventions	https://doi.org/10.1016/j.jceh.2023.101336
49	Hepatitis B virus (HBV) genotyping in Belgian patients with chronic HBV infection	https://doi.org/10.1111/j.1469-0691.2005.01144.x
50	VIRAL HEPATITIS IN PREGNANCY	https://doi.org/10.1016/S1089-3261(05)70057-X
51	Hepatitis E virus (HEV) infection in patients with cirrhosis is associated with rapid decompensation and death	https://doi.org/10.1016/j.jhep.2006.09.016
52	Residual risk of mother-to-child transmission of hepatitis B virus infection despite timely birth-dose vaccination in Cameroon (ANRS 12303): a single-centre, longitudinal observational study	https://doi.org/10.1016/S2214-109X(22)00026-2
53	HBV epidemiology in Latin America	https://doi.org/10.1016/S1386-6532(05)80022-8
54	THE EPIDEMIOLOGY OF VIRAL HEPATITIS IN THE UNITED STATES	https://doi.org/10.1016/S0889-8553(21)00146-1
55	Hepatitis B e Antigen Negative Chronic Hepatitis in Indian Patients : A Reality	https://doi.org/10.1016/S0377-1237(07)80004-9
56	Genotype characteristic and phylogenetic analysis of hepatitis B virus in northeast-Iran	https://doi.org/10.1016/j.meegid.2018.02.004
57	The global prevalence of hepatitis D virus infection: Systematic review and meta-analysis	https://doi.org/10.1016/j.jhep.2020.04.008
58	The significance of hepatitis B virus (HBV) genotypes for the disease and treatment outcome among patients with chronic hepatitis B in Serbia	https://doi.org/10.1016/j.jcv.2013.06.017
59	Clinical Profile and Efficacy of Antivirals in Hepatitis B Virus Reactivation, in Patients With Cancer Receiving Chemotherapy	https://doi.org/10.1016/j.jceh.2020.06.008

60	Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013	https://doi.org/10.1016/S0140-6736(15)61412-X
61	Beneficial effects of lamivudine in hepatitis B virus-related decompensated cirrhosis	https://doi.org/10.1016/S0168-8278(00)80372-4
62	RNA editing sites and triplet usage in exomes of bat RNA virus genomes of the family Paramyxoviridae	https://doi.org/10.1016/j.micpath.2024.106796
63	Evaluation of the frequency of precore/core mutation in patients with chronic hepatitis B, Kerman, Southeast of Iran	https://doi.org/10.1016/S2222-1808(16)61093-9
64	Prevalence of hepatitis virus types B through E and genotypic distribution of HBV and HCV in Ho Chi Minh City, Vietnam	https://doi.org/10.1016/S1386-6346(03)00166-9
65	Incidence and clinical implication of TT virus in patients with hepatitis and its frequency in blood donors in India	https://doi.org/10.1016/j.mjafi.2015.06.023
66	From viral pathobiology to the treatment of hepatitis B virus infection EASL Monothematic Conference (Istanbul, Turkey, October 6-8, 2005)	https://doi.org/10.1016/j.jhep.2006.03.004
67	Systemic infections associated with tattoos or permanent makeup: A systematic review	https://doi.org/10.1016/j.medcli.2021.01.014
68	Natural killer cells contribute to hepatic injury and help in viral persistence during progression of hepatitis B e-antigen-negative chronic hepatitis B virus infection	https://doi.org/10.1016/j.cmi.2016.05.009
69	Systemic infections associated with tattoos or permanent makeup: A systematic review	https://doi.org/10.1016/j.medcle.2021.01.026
70	Differential diagnosis of acute liver failure in India: Original Article	https://doi.org/10.1016/S1665-2681(19)31998-2
71	Hepatitis C, D and E virus infection	https://doi.org/10.1016/0950-3528(90)90060-T
72	Hepatitis B infection control in Colombian Amazon after 15 years of hepatitis B vaccination. Effectiveness of birth dose and current prevalence	https://doi.org/10.1016/j.vaccine.2017.11.004
73	Molecular epidemiology of a large outbreak of hepatitis B linked to autohaemotherapy	https://doi.org/10.1016/S0140-6736(00)02529-0
74	Molecular characterization of the Hepatitis B virus genotypes in Colombia: A Bayesian inference on the genotype F	https://doi.org/10.1016/j.meegid.2010.10.003
75	Hepatitis Delta Virus: Genetics and Pathogenesis	https://doi.org/10.1016/S0272-2712(18)30279-8
76	VIRAL HEPATITIS A, B, AND C	https://doi.org/10.1016/S1089-3261(05)70096-9
77	International collaborative study on the 3rd WHO International Standard for hepatitis B surface antigen	https://doi.org/10.1016/j.jcv.2016.06.003
78	Association of an IFN- γ variant with susceptibility to chronic hepatitis B by the enhancement of HBV DNA replication	https://doi.org/10.1016/j.cyto.2021.155525
79	Prophylaxis for Hepatitis B Virus Reactivation after Allogeneic Stem Cell Transplantation in the Era of Drug Resistance and Newer Antivirals: A Systematic Review and Meta-Analysis	https://doi.org/10.1016/j.bbmt.2018.02.027
80	Role of hepatitis C virus in dual and triple hepatitis virus infection	https://doi.org/10.1016/0270-9139(95)90615-0
81	Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study	https://doi.org/10.1016/S2468-1253(18)30056-6

82	Hepatitis B virus preS2Δ38-55 variants: A newly identified risk factor for hepatocellular carcinoma	https://doi.org/10.1016/j.jhepr.2020.100144
83	Global Epidemiology OF HCC	https://doi.org/10.1016/j.jceh.2024.102446
84	Epidemiology of Viral Hepatitis and Hepatocellular Carcinoma	https://doi.org/10.1053/j.gastro.2011.12.061
85	Molecular Biology of Non-A, Non-B Hepatitis Agents: Hepatitis C and Hepatitis E Viruses	https://doi.org/10.1016/S0065-3527(08)60277-8
86	Association of baseline vitamin D levels with clinical parameters and treatment outcomes in chronic hepatitis B	https://doi.org/10.1016/j.jhep.2015.06.025
87	Chapter Six - T Lymphocytes as Measurable Targets of Protection and Vaccination Against Viral Disorders	https://doi.org/10.1016/bs.ircmb.2018.07.006
88	Co-infections with hepatitis B and C viruses in human immunodeficiency virus-infected patients in Morocco	https://doi.org/10.1111/1469-0691.12252
89	Viral Hepatitis in pregnancy	https://doi.org/10.1016/j.ejogrb.2020.11.052
90	Prevalence of hepatitis viruses among multi-transfused homogenous thalassaemia patients	https://doi.org/10.1016/S1386-6346(00)00102-9
91	Infectious Hepatitis: A 3-Year Retrospective Study at a Tertiary Care Hospital in India	https://doi.org/10.4103/ijmm.IJMM_19_197
92	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: A hospital based study	https://doi.org/10.4103/0255-0857.115631
93	Clinicoepidemiological characteristics of viral hepatitis in migrants and travellers of the +Redivi network	https://doi.org/10.1016/j.tmaid.2019.02.001
94	An outbreak of suspected water-borne epidemic non-A non-B hepatitis in northern Botswana with a high prevalence of hepatitis B carriers and hepatitis delta markers among patients	https://doi.org/10.1016/0035-9203(89)90731-1
95	Clinical impact of occult HBV infections	https://doi.org/10.1016/S1386-6532(05)80005-8
96	Spontaneous Increases in Alanine Aminotransferase Levels in Asymptomatic Chronic Hepatitis B Virus-Infected Patients	https://doi.org/10.1053/j.gastro.2009.01.011
97	Opportunistic screening using point-of-care testing leads to successful linkage to care of HBV-infected migrant populations in a low endemic country	https://doi.org/10.1016/j.jve.2024.100369
98	Safety of Complete and Sustained Prophylaxis Withdrawal in Patients Liver-transplanted for Hepatitis B Virus-related Cirrhosis at Low Risk of Hepatitis B Virus Recurrence	https://doi.org/10.1016/S0973-6883(11)60134-5
99	Profile of Hepatitis B Virus, Hepatitis C Virus, Hepatitis D Virus and Human Immunodeficiency Virus Infections in Hemodialysis Patients of a Tertiary Care Hospital in Uttarakhand	https://doi.org/10.1016/j.jceh.2013.02.003
100	Global burden of acute viral hepatitis and its association with socioeconomic development status, 1990–2019	https://doi.org/10.1016/j.jhep.2021.04.035
101	Travelers visiting friends and relatives (VFR) and imported infectious disease: Travelers, immigrants or both? A comparative analysis	https://doi.org/10.1016/j.tmaid.2013.07.004
102	Imported and autochthonous leprosy presenting in Madrid (1989–2015): A case series and review of the literature	https://doi.org/10.1016/j.tmaid.2016.06.008
103	Enzyme-linked immunosorbent assay for diagnosis of acute sporadic hepatitis E in Egyptian children	https://doi.org/10.1016/0140-6736(92)91647-Q
104	Pathophysiology of Hepatitis C and HIV Coinfection	https://doi.org/10.1177/1055329003254855

10	Transfusion-associated viral infections	https://doi.org/10.1016/0045-9380(87)90024-7
5		
10	Holiday haemodialysis and imported hepatitis	https://doi.org/10.1016/j.jcv.2009.04.007
6	C virus infection: A series of sixteen cases in two large haemodialysis units	
10	Qualitative analysis of stochastically perturbed	https://doi.org/10.1016/j.chaos.2018.11.023
7	SIRS epidemic model with two viruses	
10	Viral hepatitis during pregnancy	https://doi.org/10.1016/S0020-7292(00)00264-2
8		
10	Multimodality Imaging of Common and	https://doi.org/10.1053/j.sult.2009.07.001
9	Uncommon Cystic Focal Liver Lesions	
11	VIRAL HEPATITIS, A THROUGH E,	https://doi.org/10.1016/S0889-8553(21)00607-5
0	COMPLICATING PREGNANCY	
11	Acute hepatitis E virus infection in a migrant	https://doi.org/10.1016/j.tmaid.2017.03.014
1	population in North East Italy: A retrospective analysis	
11	An overview of the hepatitis viruses	https://doi.org/10.1111/j.1469-0691.1996.tb00219.x
2		
11	India	https://doi.org/10.1016/S0140-6736(98)03010-4
3		
11	Virological surveillance, molecular phylogeny,	https://doi.org/10.1016/j.sjbs.2020.11.089
4	and evolutionary dynamics of hepatitis C virus subtypes 1a and 4a isolates in patients from Saudi Arabia	
11	Molecular study of HCV detection, genotypes	https://doi.org/10.1016/S2221-1691(12)60091-4
5	and their routes of transmission in North West Frontier Province, Pakistan	
11	ACOG Educational Bulletin: Viral Hepatitis in	https://doi.org/10.1016/S0020-7292(98)00205-9
6	Pregnancy	
11	Clinicopathologic Course of Hepatitis B	https://doi.org/10.1016/S0272-6386(12)80163-6
7	Infection in Surface Antigen Carriers Following Living-Related Renal Transplantation	
11	Association of genotypes with viral load and	https://doi.org/10.1016/j.bjm.2016.07.014
8	biochemical markers in HCV-infected Sindhi patients	
11	Biología de los virus de la hepatitis	https://doi.org/10.1016/S0304-5412(00)70128-4
9		
12	Delta hepatitis: an update	https://doi.org/10.1016/S0168-8278(03)00331-3
0		
12	SEROLOGIC DIAGNOSIS OF VIRAL	https://doi.org/10.1016/S0889-8553(21)00147-3
1	HEPATITIS	
12	Gastroenterological emergencies in the tropics	https://doi.org/10.1016/0950-3528(91)90024-U
2		
12	Viral exanthems	https://doi.org/10.1016/1040-0486(92)90019-E
3		
12	Undifferentiated tropical febrile illness in	https://doi.org/10.1016/j.jiph.2016.09.014
4	Cordoba, Colombia: Not everything is dengue	
12	IMMUNOLOGIC ASSESSMENT OF	https://doi.org/10.1016/S0889-8561(22)00784-6
5	INFECTIOUS DISEASES	
12	Clinical and biochemical diagnosis of jaundice	https://doi.org/10.1016/0950-3528(89)90005-5
6		
12	Viral hepatitis	https://doi.org/10.1016/S0968-6053(06)80012-8
7		
12	HEPATITIS E	https://doi.org/10.1016/S0889-8553(21)00152-7
8		
12	THE PREGNANT TRAVELER	https://doi.org/10.1016/S0891-5520(05)70008-8
9		
13	Evaluation of 24-hour gastric acidity in patients	https://doi.org/10.1016/S0168-8278(96)80067-5
0	with hepatic cirrhosis	
13	Enzyme immunoassay for the detection of	https://doi.org/10.1016/0166-0934(94)90106-6
1	antibody to hepatitis E virus based on synthetic peptides	
13	HEPATITIS C VIRUS INFECTION	https://doi.org/10.1016/S0011-8532(22)00144-6
2		

13	Hepatitis E virus (HEV): Molecular cloning and sequencing of the full-length viral genome			https://doi.org/10.1016/0042-6822(91)90760-9	
3					
13	Immunological characterization of a viral agent involved in epidemic and sporadic non-A,non-B hepatitis			https://doi.org/10.1016/S0769-2617(87)80087-4	
4					
13	The discovery of the hepatitis viruses			https://doi.org/10.1016/0016-5085(93)90261-A	
5					
13	Liver Disease in Pregnancy			https://doi.org/10.1016/S0025-7125(16)30652-6	
6					
13	Virus Infection of Polarized Epithelial Cells			https://doi.org/10.1016/S0065-3527(08)60086-X	
7					
13	Prior hepatitis A virus infection enhances acute hepatitis E virus infection			https://doi.org/10.1016/0306-9877(94)90100-7	
8					
13	Recent developments in viral hepatitis			https://doi.org/10.1016/S0011-5029(86)80012-8	
9					
14	FULMINANT VIRAL HEPATITIS			https://doi.org/10.1016/S0889-8553(21)00254-5	
0					
14	Viral hepatitis			https://doi.org/10.1016/S0950-3501(05)80308-3	
1					
14	UPDATE ON VIRAL HEPATITIS IN CHILDREN			https://doi.org/10.1016/S0031-3955(05)70397-7	
2					
14	Acute hepatitis B infection in Aboriginal Australians			https://doi.org/10.1111/j.1753-6405.1993.tb00164.x	
3					
14	Current and future challenges in quality assurance in molecular diagnostics			https://doi.org/10.1016/j.cca.2021.05.004	
4					
14	FULMINANT HEPATIC FAILURE			https://doi.org/10.1016/S0749-0704(05)70391-2	
5					
14	Hazards of hepatitis at the Hajj			https://doi.org/10.1016/j.tmaid.2008.09.008	
6					
14	Measles-derived vaccines to prevent emerging viral diseases			https://doi.org/10.1016/j.micinf.2018.01.005	
7					
14	Acute and chronic hepatitis			https://doi.org/10.1016/S0957-5839(06)80007-2	
8					
14	New Therapeutic Aspects in Fulminant Hepatic Failure			https://doi.org/10.1378/chest.100.3_Supplement.1935	
9					
PubMed Search					
1	Dinesha TR, Boobalan J, Sivamalar S, Subashini D, Solomon SS, Murugavel KG, Balakrishnan P, Smith DM, Saravanan S.	Occult HBV infection in HIV-infected adults and evaluation of pooled NAT for HBV	J Viral Hepat	2018	10.1111/jvh.12858
2	Irshad M, Acharya SK.	Hepatitis D virus (HDV) infection in severe forms of liver diseases in north India	Eur J Gastroenterol Hepatol	1996	10.1097/00042737-199610000-00011
3	Ghuman HK, Kaur S.	Delta-hepatitis	Indian J Pediatr	1995	10.1007/BF02825118
4	Patel FM, Goswami PN.	Presence of acute hepatitis D infection in HBsAg positive cancer patients: A preliminary study from west Gujarat	Indian J Med Res	2016	10.4103/0971-5916.192071
5	Jaiswal SP, Jain AK, Naik G, Soni N, Chitnis DS.	Viral hepatitis during pregnancy	Int J Gynaecol Obstet	2001	10.1016/s0020-7292(00)00264-2
6	Zaidi G, Idrees M, Malik FA, Amin I, Shahid M, Younas S, Hussain R, Awan Z, Tariq A, Parveen K.	Prevalence of hepatitis delta virus infection among hepatitis B virus surface antigen positive patients circulating in the largest province of Pakistan	Virol J	2010	10.1186/1743-422X-7-283
7	Ghuman HK, Prabhakar H.	Prevalence of hepatitis A, B, C & D in Ludhiana	Indian J Med Sci	1995	
8	Arankalle VA, Ramamoorthy CL, Banerjee K.	Seroepidemiology of hepatitis delta virus infection in Pune, India	Trans R Soc Trop Med Hyg	1992	10.1016/0035-9203(92)90457-n
9	Irshad M, Sharma Y, Dhar I, Singh J, Joshi YK.	Transfusion-transmitted virus in association with hepatitis A-E viral infections in various forms of liver diseases in India	World J Gastroenterol	2006	10.3748/wjg.v12.i15.2432
10	Jain P, Prakash S, Gupta S, Singh KP, Shrivastava S, Singh DD, Singh J, Jain A.	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: a hospital based study	Indian J Microbiol	2013	10.4103/0255-0857.115631

11	Riaz M, Idrees M, Kanwal H, Kabir F.	An overview of triple infection with hepatitis B, C and D viruses	Virology	2011	10.1186/1743-422X-8-368
12	Aftab M, Naz S, Aftab B, Ali A, Rafique S, Fatima Z, Inamullah, Idrees M.	Characterization of Hepatitis Delta Virus Among Pregnant Women of Pakistan	Viral Immunology	2019	10.1089/vim.2019.0048
13	Bendre SV, Bavdekar AR, Bhavsar SA, Pandit AN, Chitambar SD, Arankalle VA.	Fulminant hepatic failure: etiology, viral markers and outcome	Indian Pediatrics	1999	
14	Jat SL, Gupta N, Kumar T, Mishra S, S A, Yadav V, Goel A, Aggarwal R.	Prevalence of hepatitis D virus infection among hepatitis B virus-infected individuals in India	Indian Journal of Gastroenterology	2015	10.1007/s12664-015-0555-6
15	Singh V, Goenka MK, Bhasin DK, Kochhar R, Singh K.	A study of hepatitis delta virus infection in patients with acute and chronic liver disease from northern India	J Viral Hepat	1995	10.1111/j.1365-2893.1995.tb00021.x
16	Mittal G, Gupta P, Thakuria B, Mukhiya GK, Mittal M.	Profile of hepatitis B virus, hepatitis C virus, hepatitis d virus and human immunodeficiency virus infections in hemodialysis patients of a tertiary care hospital in uttarakhand	J Clin Exp Hepatol	2013	10.1016/j.jceh.2013.02.003
17	Pal SR, Prasad SR.	Delta virus infections in and around Chandigarh, northern India: evidence for endemicity	Trop Geogr Med	1987	
18	Tandon BN, Acharya SK, Tandon A.	Epidemiology of hepatitis B virus infection in India	Gut	1996	10.1136/gut.38.suppl_2.s56
19	Abbas Z, Jafri W, Raza S.	Hepatitis D: Scenario in the Asia-Pacific region	World Journal of Gastroenterology	2010	10.3748/wjg.v16.i5.554
20	Acharya SK, Madan K, Dattagupta S, Panda SK.	Viral hepatitis in India	Natl Med J India	2006	
21	Banker DD, Desai P, Brawner TA, Decker RH.	Hepatitis delta virus infection in Bombay	Trans R Soc Trop Med Hyg	1992	10.1016/0035-9203(92)90251-7
22	Saracco G, Macagno S, Rosina F, Rizzetto M.	Serologic markers with fulminant hepatitis in persons positive for hepatitis B surface antigen. A worldwide epidemiologic and clinical survey	Ann Intern Med	1988	10.7326/0003-4819-108-3-380
23	Sonkar A, Bishwal SC, Sharma RK, Barde PV.	Prevalence of Hepatitis D virus antibodies in Hepatitis B patients treated at tertiary care unit at Jabalpur Central India	Indian Journal of Microbiology	2022	10.1016/j.ijmmb.2021.11.003
24	Rauff B, Idrees M, Shah SA, Butt S, Butt AM, Ali L, Hussain A, Irshad-Ur-Rehman, Ali M.	Hepatitis associated aplastic anemia: a review	Virology	2011	10.1186/1743-422X-8-87
25	Bhattacharyya S, Dalal BS, Lahiri A.	Hepatitis D infectivity profile among hepatitis B infected hospitalised patients in Calcutta	Indian Journal of Public Health	1998	
26	Pal D, Dalal BS, Haldar KK, Das B, Chattopadhyay UK, Das De G.	The prevalence of hepatitis D in hepatitis B patients--a hospital based study	Indian Journal of Public Health	1996	
27	Ramachandran K, Agarwal R, Sharma MK, Bhatia V, Gupta E.	Prevalence of Hepatitis Delta Virus Infection among Hepatitis B Virus-Infected and Exposed Patients	J Glob Infect Dis	2020	10.4103/jgid.jgid_137_19
28	Chakraborty P, Kailash U, Jain A, Goyal R, Gupta RK, Das BC, Kar P.	Seroprevalence of hepatitis D virus in patients with hepatitis B virus-related liver diseases	Indian J Med Res	2005	
29	Desai P, Banker DD.	Hepatitis B and delta viruses in fulminant hepatitis	Indian Journal of Gastroenterology	1990	
30	Aggarwal V, Prakash C, Yadav S, Chattopadhyay D.	Prevalence of transfusion associated infections in multitransfused children in relation to mandatory screening of HIV in donated blood	Southeast Asian J Trop Med Public Health	1997	
31	Kaur H, John M, Pawar G, Ninan J, Verma V.	Spectrum of acute viral hepatitis and its clinical outcome--a study from Ludhiana, Punjab	Indian J Med Sci	2003	
32	Arora DR, Sehgal R, Gupta N, Yadav A, Mishra N, Siwach SB.	Prevalence of parenterally transmitted hepatitis viruses in clinically diagnosed cases of hepatitis	Indian Journal of Microbiology	2005	10.4103/0255-0857.13873
33	Radhakrishnan S, Abraham P, Raghuraman S, John GT, Thomas PP, Jacob CK, Sridharan G.	Role of molecular techniques in the detection of HBV DNA & HCV RNA among renal transplant recipients in India	Indian J Med Res	2000	
34	Abraham P, John GT, Raghuraman S, Radhakrishnan S, Thomas PP, Jacob CK, Sridharan G.	GB virus C/hepatitis G virus and TT virus infections among high risk renal transplant recipients in India	J Clin Virol	2003	10.1016/s1386-6532(02)00239-1

35	Guptan RC, Thakur V, Sarin SK, Banerjee K, Khandekar P.	Frequency and clinical profile of precore and surface hepatitis B mutants in Asian-Indian patients with chronic liver disease	Am J Gastroenterol	1996	
36	Batra Y, Bhatkal B, Ojha B, Kaur K, Saraya A, Panda SK, Acharya SK.	Vaccination against hepatitis A virus may not be required for schoolchildren in northern India: results of a seroepidemiological survey	Bull World Health Organ	2002	
37	Singh J, Prakash C, Gupta RS, Bora D, Jain DC, Datta KK.	Epidemiology of endemic viral hepatitis in an urban area of India: a retrospective community study in Alwar	Bull World Health Organ	1997	
38	Murhekar MV, Murhekar KM, Arankalle VA, Sehgal SC.	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India	Trans R Soc Trop Med Hyg	2005	10.1016/j.trstmh.2004.10.002
39	Borkakoty BJ, Biswas D, Mahanta J.	Delta hepatitis infection in northeast India	Indian J Gastroenterol	2007	
40	Banker DD, Desai PR, Mehta JM.	Hepatitis delta virus infection in Bombay	Prog Clin Biol Res	1987	
41	Antony J, Celine T.	A Hospital-based Retrospective Study on Frequency and Distribution of Viral Hepatitis	J Glob Infect Dis	2014	10.4103/0974-777X.138499
42	Butt FA, Amin I, Idrees M, Iqbal M.	Hepatitis delta virus genotype-1 alone cocirculates with hepatitis B virus genotypes A and D in Pakistan	Eur J Gastroenterol Hepatol	2014	10.1097/MEG.0000000000000007
43	Khan AU, Waqar M, Akram M, Zaib M, Wasim M, Ahmad S, Niaz Z, Ali S, Ali H, Idrees M, Bajwa MA.	True prevalence of twin HDV-HBV infection in Pakistan: a molecular approach	Virol J	2011	10.1186/1743-422X-8-420
44	Irshad M, Peter S.	Spectrum of viral hepatitis in thalassemic children receiving multiple blood transfusions	Indian J Gastroenterol	2002	
45	Kochhar R, Singh V, Bhasin DK, Mehta SK.	Delta hepatitis infection in north India. A preliminary report	J Assoc Physicians India	1989	
46	Amarapurkar DN, Kumar A, Vaidya S, Murti P, Bichile SK, Kalro RH, Desai HG.	Frequency of hepatitis B, C and D and human immunodeficiency virus infections in multi-transfused thalassemics	Indian J Gastroenterol	1992	
47	Saravanan S, Velu V, Kumarasamy N, Shankar EM, Nandakumar S, Murugavel KG, Balakrishnan P, Solomon S, Thyagarajan SP.	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	Trans R Soc Trop Med Hyg	2008	10.1016/j.trstmh.2008.05.001
48	Thomas PP, Samuel BU, Jacob CK, John TJ, Shastri JC.	Low prevalence of hepatitis D (delta) virus infection in a nephrology unit in south India	Trans R Soc Trop Med Hyg	1991	10.1016/0035-9203(91)90381-8
49	Saravanan S, Madhavan V, Velu V, Murugavel KG, Waldrop G, Solomon SS, Balakrishnan P, Kumarasamy N, Smith DM, Mayer KH, Solomon S, Thyagarajan SP.	High prevalence of hepatitis delta virus among patients with chronic hepatitis B virus infection and HIV-1 in an intermediate hepatitis B virus endemic region	J Int Assoc Provid AIDS Care	2014	10.1177/2325957413488166
50	Aftab M, Amin I, Idrees M, Ali A, Rafique S, Naz S.	Molecular epidemiology of hepatitis delta and hepatitis B viruses circulating in two major provinces (East and North-West) of Pakistan	Infect Genet Evol	2018	10.1016/j.meegid.2018.06.013
51	Moatter T, Abbas Z, Shabir S, Jafri W.	Clinical presentation and genotype of hepatitis delta in Karachi	World J Gastroenterol	2007	10.3748/wjg.v13.i18.2604
52	Amin I, Rafique S, Ali A, Ahmed N, Shahid M, Afzal S, Tahir S, Waqas M, Bibi S, Elgorban AM, Idrees M, Shah M, Syed A.	Improving Access to Anti-HDV Testing: Development and Validation of an Affordable In-House ELISA Assay	ACS Omega	2024	10.1021/acsomega.3c09843
53	Arya SC, Ashraf SJ, Pathak VP, Nanda V, Parande CM, Tajuddin S.	Serological profiles for HBV, HDV, HIV-1 and HTLV-1 in Saudi patients with a malignancy	J Commun Dis	1991	
54	Amarapurkar DN, Vishwanath N, Kumar A, Shankaran S, Murti P, Kalro RH, Desai HG.	Prevalence of delta virus infection in high risk population and hepatitis B virus related liver diseases	Indian J Gastroenterol	1992	
55	Rajani M, Jais M.	Magnitude and pattern of hepatitis B infection in clinically suspected infectious hepatitis at a tertiary care hospital in urban India	J Glob Infect Dis	2014	10.4103/0974-777X.138502
56	Acharya SK, Panda SK, Duphare H, Dasarathy S, Ramesh R,	Chronic hepatitis in a large Indian hospital	Natl Med J India	1993	

	Jameel S, Nijhawan S, Irshad M, Tandon BN.				
57	Gupta V, Arora R, Saha A, Dhir A, Kar P, Bamezai R.	Novel variations in the signal peptide region of transforming growth factor beta1 gene in patients with hepatitis: a brief report from India	Int Immunogenet	J 2005	10.1111/j.1744-313X.2005.00499.x
58	Singh J, Bhatia R, Gandhi JC, Kaswekar AP, Khare S, Patel SB, Oza VB, Jain DC, Sokhey J.	Outbreak of viral hepatitis B in a rural community in India linked to inadequately sterilized needles and syringes	Bull World Health Organ	1998	
59	Jaiswal SP, Chitnis DS, Artwani KK, Naik G, Jain AK.	Prevalence of anti-delta antibodies in central India	Trop Gastroenterol	1999	
60	Irshad M, Acharya SK.	Status of hepatitis viral markers in patients with acute and chronic liver diseases in northern India	Intervirolgy	1994	10.1159/000150404
61	Choudhry VP, Acharya SK.	Hepatitis B, C & D viral markers in multitransfused thalassemic children: long-term complications and present management	Indian J Pediatr	1995	10.1007/BF02825110
62	Khuroo MS, Zargar SA, Mahajan R, Javid G, Lal R.	An epidemic of hepatitis D in the foothills of the Himalayas in south Kashmir	J Hepatol	1988	10.1016/s0168-8278(88)80476-8
63	Acharya SK, Dasarathy S, Kumer TL, Sushma S, Prasanna KS, Tandon A, Sreenivas V, Nijhawan S, Panda SK, Nanda SK, Irshad M, Joshi YK, Duttagupta S, Tandon RK, Tandon BN.	Fulminant hepatitis in a tropical population: clinical course, cause, and early predictors of outcome	Hepatology	1996	10.1002/hep.510230622
64	Jaiswal SP, Chitnis DS, Jain AK, Inamdar S, Porwal A, Jain SC.	Prevalence of hepatitis viruses among multi-transfused homogenous thalassaemia patients	Hepatol Res	2001	10.1016/s1386-6346(00)00102-9
65	Farber NA.	[Characteristics of the course of epidemic non-A, non-B viral hepatitis in pregnant women]	Akush Ginekol (Mosk)	1986	
66	Sumathy S, Thyagarajan SP, Latif R, Madanagopalan N, Raguram K, Rajasambandam P, Gowans E.	A dipstick immunobinding enzyme-linked immunosorbent assay for serodiagnosis of hepatitis B and delta virus infections	J Virol Methods	1992	10.1016/0166-0934(92)90177-f
67	Narang A, Gupta P, Kar P, Chakravarty A.	A prospective study of delta infection in fulminant hepatic failure	J Assoc Physicians India	1996	
68	Ghuman HK, Tribhuwan SR.	Acute delta hepatitis without hepatitis B surface antigen detectable in the blood	J Infect	1992	10.1016/0163-4453(92)91679-6
69	Desai HG.	Cryptogenic cirrhosis: a vanishing entity	J Assoc Physicians India	2009	
70	Gupta P, Kar P, Chakravarty A, Jain A.	Delta virus infection in cirrhotics in a north Indian hospital	J Assoc Physicians India	1993	
71	Chakravarty R.	Diagnosis and monitoring of chronic viral hepatitis: serologic and molecular markers	Front Biosci (Schol Ed)	2011	10.2741/s141
72	Kao C, Surjit M, Ranjith-Kumar CT.	Editorial: Viral Hepatitis: Pathophysiology, Prevention, and Control	Front Cell Infect Microbiol	2021	10.3389/fcimb.2021.633580
73	Arora A, Anand AC, Kumar A, Singh SP, Aggarwal R, Dhiman RK, Aggarwal S, Alam S, Bhaumik P, Dixit VK, Goel A, Goswami B, Kumar A, Kumar M, Madan K, Murugan N, Nagral A, Puri AS, Rao PN, Saraf N, Saraswat VA, Sehgal S, Sharma P, Shenoy KT, Wadhawan M; Members of the INASL taskforce on Hepatitis B.	INASL Guidelines on Management of Hepatitis B Virus Infection in Patients receiving Chemotherapy, Biologicals, Immunosuppressants, or Corticosteroids	J Clin Exp Hepatol	2018	10.1016/j.jceh.2018.06.010
74	Arora A, Singh SP, Kumar A, Saraswat VA, Aggarwal R, Bangar M, Bhaumik P, Devarbhavi H, Dhiman RK, Dixit VK, Goel A, Goswami B, Kapoor D, Madan K, Narayan J, Nijhawan S, Pandey G, Rai RR, Sahu MK, Saraf N, Shalimar, Shenoy T, Thomas V, Wadhawan M; INASL Hepatitis B Taskforce.	INASL Position Statements on Prevention, Diagnosis and Management of Hepatitis B Virus Infection in India: The Andaman Statements	J Clin Exp Hepatol	2018	10.1016/j.jceh.2017.12.001

75	Kumar A, Misra PK, Rana GS, Mehrotra R.	Infection with hepatitis A, B, delta, and human immunodeficiency viruses in children receiving cycled cancer chemotherapy	J Med Virol	1992	10.1002/jmv.1890370202
76	Tan HY, Yong YK, Ng CS, Vimali J, Mohamed R, Murugesan A, Velu V, Larsson M, Shankar EM.	Mucosal-Associated Invariant T Cells: Diplomatic Front-Runners in the Fight against Hepatitis B Virus Infection	Crit Rev Immunol	2021	10.1615/CritRevImmunol.2021041408
77	Irshad M, Gupta P, Mankotia DS, Ansari MA.	Multiplex qPCR for serodetection and serotyping of hepatitis viruses: A brief review	World J Gastroenterol	2016	10.3748/wjg.v22.i20.4824
78	Maiwall R, Kumar M.	Prevention and Treatment of Recurrent Hepatitis B after Liver Transplantation	J Clin Transl Hepatol	2016	10.14218/JCTH.2015.00041
79	Mukherjee RM, Shravanti GV, Jakkampudi A, Kota R, Jangala AL, Reddy PB, Rao PN, Gupta R, Reddy DN.	Reduced Expression of DNA Damage Repair Genes High Mobility Group Box1 and Poly(ADP-ribose) Polymerase1 in Inactive Carriers of Hepatitis B Virus Infection-A Possible Stage of Viral Integration	J Clin Hepatol	2013	10.1016/j.jceh.2013.04.003
80	Lenci I, Tisone G, Di Paolo D, Marcuccilli F, Tariciotti L, Ciotti M, Svicher V, Perno CF, Angelico M.	Safety of complete and sustained prophylaxis withdrawal in patients liver-transplanted for HBV-related cirrhosis at low risk of HBV recurrence	J Hepatol	2011	10.1016/j.jhep.2010.12.036
81	Anbazhagan GK, Krishnamoorthy S, Thiyagarajan T.	Seroprevalence of HCV and its co-infection with HBV and HIV among liver disease patients of South Tamil Nadu	World J Hepatol	2010	10.4254/wjh.v2.i1.42
82	Irshad M, Chaudhuri PS, Joshi YK.	Superoxide dismutase and total anti-oxidant levels in various forms of liver diseases	Hepatol Res	2002	10.1016/s1386-6346(01)00181-4
83	Khuroo MS, Sofi AA.	The Discovery of Hepatitis Viruses: Agents and Disease	J Clin Hepatol	2020	10.1016/j.jceh.2020.04.006
84	Sahu R, Goswami S, Narahari Sastry G, Rawal RK.	The Preventive and Therapeutic Potential of the Flavonoids in Liver Cirrhosis: Current and Future Perspectives	Chem Biodivers	2023	10.1002/cbdv.202201029

Supplementary Table 2 Summary of literature screening and study selection

S. No.	Title of Article	I/E Decision	Reason for Exclusion
1	A dipstick immunobinding enzyme-linked immunosorbent assay for serodiagnosis of	Excluded	Excluded due to incomplete data
2	A Hospital-based Retrospective Study on Frequency and Distribution of Viral Hepatitis	Included	
3	A prospective study of delta infection in fulminant hepatic failure.	Excluded	Excluded due to incomplete data
4	A study of hepatitis delta virus infection in patients with acute and chronic liver disease from northern India	Excluded	Excluded due to incomplete data
5	A STUDY OF HEPATITIS-DELTA VIRUS-INFECTION IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASE FROM NORTHERN INDIA	Included	
6	Epidemiology of hepatitis B virus infection in India	Excluded	Studies out of scope
7	Aetiology, clinical course and outcome of sporadic acute viral hepatitis in pregnancy	Included	
8	An epidemic of hepatitis D in the foothills of the Himalayas in South Kashmir	Included	
9	Biochemical Detection of Hepatitis B Virus Constituents	Excluded	Excluded due to incomplete data
10	Characterization of Hepatitis Delta Virus Among Pregnant Women of Pakistan	Excluded	Excluded due to incomplete data
11	Clinical presentation and genotype of hepatitis delta in Karachi	Excluded	Excluded due to incomplete data
12	Clinicoepidemiological characteristics of viral hepatitis in migrants and travellers of the +Redivi network	Included	
13	Delta virus infection in cirrhotics in a north Indian hospital.	Included	
14	Delta virus infections in and around Chandigarh, northern India: evidence for endemicity	Included	
15	Enzyme-linked immunosorbent assay for diagnosis of acute sporadic hepatitis E in Egyptian children	Excluded	Excluded due to incomplete data
16	Frequency of hepatitis B, C and D and human immunodeficiency virus infections in multi-transfused thalasseemics	Included	
17	Frequency of Hepatitis D Viral Infection in Chronic Hepatitis B Patients in Pakistan	Excluded	Irrelevant article
18	GB virus C/hepatitis G virus and TT virus infections among high risk renal transplant recipients in India	Excluded	Excluded due to incomplete data
19	Characterization of HIV-HBV coinfection in a multinational HIV-infected cohort	Excluded	Irrelevant article
20	Hepatitis B and delta viruses in fulminant hepatitis	Included	
21	Hepatitis B e Antigen Negative Chronic Hepatitis in Indian Patients : A Reality	Excluded	Excluded due to incomplete data
22	Hepatitis D: Scenario in the Asia-Pacific region	Excluded	Irrelevant article
23	An overview of Triple infection with Hepatitis B, C and D viruses	Excluded	Irrelevant article
24	STATUS OF HEPATITIS VIRAL MARKERS IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASES IN NORTHERN INDIA	Excluded	Irrelevant article
25	Mucosal-Associated Invariant T Cells: Diplomatic Front-Runners in the Fight against Hepatitis B Virus Infection	Excluded	Irrelevant article
26	Hepatitis B Virus Genotypes, Epidemiological Characteristics and Clinical Presentation of HBV Chronic Infection in Immigrant Populations Living in Southern Italy	Excluded	Irrelevant article
27	Improving Access to Anti-HDV Testing: Development and Validation of an Affordable In-House ELISA Assay	Excluded	Irrelevant article
28	An overview of treatment response rates to various anti-viral drugs in Pakistani Hepatitis B Virus infected patients	Excluded	Irrelevant article
29	Hepatitis D infectivity profile among hepatitis B infected hospitalised patients in Calcutta	Included	
30	Hepatitis D virus (HDV) infection in severe forms of liver diseases in north India	Excluded	Excluded due to incomplete data
31	Hepatitis delta virus genotype-1 alone cocirculates with hepatitis B virus genotypes A and D in Pakistan	Excluded	Irrelevant article
32	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India	Included	

33	Novel variations in the signal peptide region of transforming growth factor β 1 gene in patients with hepatitis: a brief report from India	Excluded	Irrelevant article
34	Hepatitis delta virus infection in Bombay	Included	
35	The Discovery of Hepatitis Viruses: Agents and Disease	Excluded	Irrelevant article
36	Hepatitis E virus (HEV) infection in patients with cirrhosis is associated with rapid decompensation and death	Excluded	Excluded due to incomplete data
37	Diagnostics and treatment of viral hepatitis in pregnancy	Excluded	Irrelevant article
38	High prevalence of hepatitis delta virus among patients with chronic hepatitis B virus infection and HIV-1 in an intermediate hepatitis B virus endemic region	Included	
39	Subacute hepatic failure - Diagnosis of exclusion?	Excluded	Irrelevant article
40	Editorial: Viral Hepatitis: Pathophysiology, Prevention, and Control	Excluded	Irrelevant article
41	LOW PREVALENCE OF HEPATITIS-D (DELTA) VIRUS-INFECTION IN A NEPHROLOGY UNIT IN SOUTH-INDIA	Included	
42	Hepatitis Associated Aplastic Anemia: A review	Excluded	Irrelevant article
43	HEPATITIS D	Excluded	Excluded due to incomplete data
44	Comparison of anti-hepatitis D virus (HDV) ETI-AB-DELTA-2 assay and the novel LIAISON® XL MUREX anti-HDV assay in the diagnosis of HDV infection	Excluded	Excluded due to incomplete data
45	Worldwide epidemiology of HBV infection, disease burden, and vaccine prevention	Excluded	Excluded due to incomplete data
46	Outcomes of Long-term Treatment of Chronic HBV Infection With Entecavir or Other Agents From a Randomized Trial in 24 Countries	Excluded	Irrelevant article
47	Reduced Expression of DNA Damage Repair Genes High Mobility Group Box1 and Poly(ADP-ribose) Polymerase1 in Inactive Carriers of Hepatitis B Virus Infection-A Possible Stage of Viral Integration	Excluded	Irrelevant article
48	Magnitude and pattern of hepatitis B infection in clinically suspected infectious hepatitis at a tertiary care hospital in urban India	Included	
49	Multifaceted Defects in Monocytes in Different Phases of Chronic Hepatitis B Virus Infection: Lack of Restoration after Antiviral Therapy	Excluded	Irrelevant article
50	Estimating the proportion of people with chronic hepatitis B virus infection eligible for hepatitis B antiviral treatment worldwide: a systematic review and meta-analysis	Excluded	Irrelevant article
51	Hepatitis B virus genotypes : a retrospective survey in Southwestern France, 1999-2004	Excluded	Excluded due to incomplete data
52	Spontaneous loss of surface antigen among adults living with chronic hepatitis B virus infection: a systematic review and pooled meta-analyses	Excluded	Improper study design
53	Hepatitis B virus genetic variability and evolution	Excluded	Irrelevant article
54	High Prevalence of Hepatitis B Subgenotype D4 in Northeast Brazil: an Ancient Relic from African Continent?	Excluded	Irrelevant article
55	Molecular epidemiology of hepatitis B, C, D and E viruses among children in Moscow, Russia	Excluded	Irrelevant article
56	Molecular epidemiology of hepatitis delta and hepatitis B viruses circulating in two major provinces (East and North-West) of Pakistan	Excluded	Irrelevant article
57	Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews	Excluded	Irrelevant article
58	HBV genotypes prevalence, precore and basal core mutants in Morocco	Excluded	Irrelevant article
59	HDV: Thirty years later	Excluded	Irrelevant article
60	Hepatocellular carcinoma in the developing world	Excluded	Irrelevant article
61	Molecular epidemiology, phylogenetic analysis and genotype distribution of hepatitis B virus in Saudi Arabia: Predominance of genotype D1	Excluded	Irrelevant article
62	Virologic and histologic characterisation of dual hepatitis B and C co-infection in Egyptian patients	Excluded	Irrelevant article
63	CHAPTER 7 - Viral Hepatitis: Expanding the Alphabet	Excluded	Excluded due to incomplete data
64	Prevalence and clinical-epidemiological characteristics of chronic hepatitis due to hepatitis delta virus on Gran Canaria Island	Excluded	Excluded due to incomplete data
65	Seroepidemiology of HBV and HCV in India. Strategy for control of maternal transmission of HBV and its effect. Screening methods of blood donors for control of post-transfusion hepatitis and their effects	Excluded	Irrelevant article
66	Historic and current hepatitis B viral DNA and quantitative HBsAg level are not associated with cirrhosis in non-Asian women with chronic hepatitis B	Excluded	Irrelevant article
67	Inappropriate cessation of nucleos(t)ide analog associated with reduced liver transplant-free survival in patients with HBV-related acute on chronic liver failure	Excluded	Irrelevant article
68	Naturally Occurring Variants of Hepatitis B Virus	Excluded	Irrelevant article
69	Hepatitis delta virus testing, epidemiology and management: A multicentre cross-sectional study of patients in London	Excluded	Irrelevant article
70	INASL Guidelines on Management of Hepatitis B Virus Infection in Patients receiving Chemotherapy, Biologicals, Immunosuppressants, or Corticosteroids	Excluded	Irrelevant article
71	Chronic hepatitis B in adopted Romanian children	Excluded	Irrelevant article
72	Global, regional, and national burden of hepatitis B, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019	Excluded	Irrelevant article
73	SEROLOGIC DIAGNOSIS OF VIRAL HEPATITIS****The opinions and assertions contained herein are the private views of the author and are not to be construed as official or as reflecting the views of the Department of the Army or the Department of Defense.****All material in this article is in the public domain with the exception of any borrowed tables or figures.	Excluded	Excluded due to incomplete data
74	The worldwide impact of vaccination on the control and protection of viral hepatitis B	Excluded	Irrelevant article
75	Level of Hepatitis B Virus DNA in Inactive Carriers With Persistently Normal Levels of Alanine Aminotransferase	Excluded	Irrelevant article
76	KGHeBTA (King George's Medical University Hepatitis B Therapeutic Algorithm): A New Diagnostic and Therapeutic Algorithm and Clinico-epidemiological Spectrum of Hepatitis B	Excluded	Irrelevant article
77	Acute hepatitis B virus infection in Turkey: epidemiology and genotype distribution	Excluded	Irrelevant article
78	Hepatitis B virus: From diagnosis to treatment	Excluded	Irrelevant article
79	Viral Hepatitis in Solid Organ Transplantation	Excluded	Irrelevant article
80	Alpha-fetoprotein as a tumor marker in hepatocellular carcinoma: investigations in south Indian subjects with hepatotropic virus and aflatoxin etiologies	Excluded	Irrelevant article
81	Epidemiology of HBV infection in Asian blood donors: Emphasis on occult HBV infection and the role of NAT	Excluded	Irrelevant article
82	Transfusion-Transmitted Hepatitis Virus Infection	Excluded	Irrelevant article
83	Phylogenetic analysis of hepatitis B virus full-length genomes reveals evidence for a large nosocomial outbreak in Belgium	Excluded	Irrelevant article
84	Global prevalence, cascade of care, and prophylaxis coverage of hepatitis B in 2022: a modelling study	Excluded	Irrelevant article
85	Comparative expression of pro-inflammatory and apoptotic biosignatures in chronic HBV-infected patients with and without liver cirrhosis	Excluded	Irrelevant article
86	Hepatitis in pregnancy	Excluded	Irrelevant article
87	Hepatitis B in Trans-Himalayan Tribal Population: High Prevalence, High Pediatric Burden, Virologic Patterns, and Implications for Public Health Interventions	Excluded	Irrelevant article
88	Hepatitis B virus (HBV) genotyping in Belgian patients with chronic HBV infection	Excluded	Irrelevant article
89	VIRAL HEPATITIS IN PREGNANCY	Excluded	Irrelevant article

90	Novel variations in the signal peptide region of transforming growth factor beta1 gene in patients with hepatitis: a brief report from India	Excluded	Excluded due to incomplete data
91	Residual risk of mother-to-child transmission of hepatitis B virus infection despite timely birth-dose vaccination in Cameroon (ANRS 12303): a single-centre, longitudinal observational study	Excluded	Irrelevant article
92	HBV epidemiology in Latin America	Excluded	Irrelevant article
93	THE EPIDEMIOLOGY OF VIRAL HEPATITIS IN THE UNITED STATES	Excluded	Irrelevant article
94	Occult HBV infection in HIV-infected adults and evaluation of pooled NAT for HBV	Excluded	Excluded due to incomplete data
95	Genotype characteristic and phylogenetic analysis of hepatitis B virus in northeast-Iran	Excluded	Irrelevant article
96	The global prevalence of hepatitis D virus infection: Systematic review and meta-analysis	Excluded	Irrelevant article
97	The significance of hepatitis B virus (HBV) genotypes for the disease and treatment outcome among patients with chronic hepatitis B in Serbia	Excluded	Irrelevant article
98	Clinical Profile and Efficacy of Antivirals in Hepatitis B Virus Reactivation, in Patients With Cancer Receiving Chemotherapy	Excluded	Irrelevant article
99	Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013	Excluded	Irrelevant article
100	Beneficial effects of lamivudine in hepatitis B virus-related decompensated cirrhosis	Excluded	Excluded due to incomplete data
101	RNA editing sites and triplet usage in exomes of bat RNA virus genomes of the family Paramyxoviridae	Excluded	Irrelevant article
102	Evaluation of the frequency of precore/core mutation in patients with chronic hepatitis B, Kerman, Southeast of Iran	Excluded	Irrelevant article
103	Prevalence of hepatitis virus types B through E and genotypic distribution of HBV and HCV in Ho Chi Minh City, Vietnam	Excluded	Irrelevant article
104	Incidence and clinical implication of TT virus in patients with hepatitis and its frequency in blood donors in India	Excluded	Irrelevant article
105	From viral pathobiology to the treatment of hepatitis B virus infection EASL Monothematic Conference (Istanbul, Turkey, October 6–8, 2005)	Excluded	Irrelevant article
106	Systemic infections associated with tattoos or permanent makeup: A systematic review	Excluded	Irrelevant article
107	Natural killer cells contribute to hepatic injury and help in viral persistence during progression of hepatitis B e-antigen-negative chronic hepatitis B virus infection	Excluded	Irrelevant article
108	Differential diagnosis of acute liver failure in India: Original Article	Excluded	Irrelevant article
109	Hepatitis C, D and E virus infection	Excluded	Irrelevant article
110	Hepatitis B infection control in Colombian Amazon after 15 years of hepatitis B vaccination. Effectiveness of birth dose and current prevalence	Excluded	Irrelevant article
111	Molecular epidemiology of a large outbreak of hepatitis B linked to autohaemotherapy	Excluded	Irrelevant article
112	Molecular characterization of the Hepatitis B virus genotypes in Colombia: A Bayesian inference on the genotype F	Excluded	Irrelevant article
113	Hepatitis Delta Virus: Genetics and Pathogenesis	Excluded	Irrelevant article
114	VIRAL HEPATITIS A, B, AND C	Excluded	Irrelevant article
115	International collaborative study on the 3rd WHO International Standard for hepatitis B surface antigen	Excluded	Irrelevant article
116	Association of an IFN- γ variant with susceptibility to chronic hepatitis B by the enhancement of HBV DNA replication	Excluded	Irrelevant article
117	Prophylaxis for Hepatitis B Virus Reactivation after Allogeneic Stem Cell Transplantation in the Era of Drug Resistance and Newer Antivirals: A Systematic Review and Meta-Analysis	Excluded	Irrelevant article
118	Role of hepatitis C virus in dual and triple hepatitis virus infection	Excluded	Irrelevant article
119	Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study	Excluded	Irrelevant article
120	Hepatitis B virus preS2 Δ 38–55 variants: A newly identified risk factor for hepatocellular carcinoma	Excluded	Irrelevant article
121	Global Epidemiology OF HCC	Excluded	Irrelevant article
122	Epidemiology of Viral Hepatitis and Hepatocellular Carcinoma	Excluded	Irrelevant article
123	Molecular Biology of Non-A, Non-B Hepatitis Agents: Hepatitis C and Hepatitis E Viruses	Excluded	Irrelevant article
124	Association of baseline vitamin D levels with clinical parameters and treatment outcomes in chronic hepatitis B	Excluded	Irrelevant article
125	Chapter Six - T Lymphocytes as Measurable Targets of Protection and Vaccination Against Viral Disorders	Excluded	Irrelevant article
126	Co-infections with hepatitis B and C viruses in human immunodeficiency virus-infected patients in Morocco	Excluded	Irrelevant article
127	Infectious Hepatitis: A 3-Year Retrospective Study at a Tertiary Care Hospital in India	Excluded	Irrelevant article
128	Presence of acute hepatitis D infection in HBsAg positive cancer patients: A preliminary study from west Gujarat	Included	
129	An outbreak of suspected water-borne epidemic non-A non-B hepatitis in northern Botswana with a high prevalence of hepatitis B carriers and hepatitis delta markers among patients	Excluded	Irrelevant article
130	Clinical impact of occult HBV infections	Excluded	Irrelevant article
131	Spontaneous Increases in Alanine Aminotransferase Levels in Asymptomatic Chronic Hepatitis B Virus-Infected Patients	Excluded	Irrelevant article
132	Opportunistic screening using point-of-care testing leads to successful linkage to care of HBV-infected migrant populations in a low endemic country	Excluded	Irrelevant article
133	Safety of Complete and Sustained Prophylaxis Withdrawal in Patients Liver-transplanted for Hepatitis B Virus-related Cirrhosis at Low Risk of Hepatitis B Virus Recurrence	Excluded	Irrelevant article
134	Prevalence of delta virus infection in high risk population and hepatitis B virus related liver diseases	Included	
135	Global burden of acute viral hepatitis and its association with socioeconomic development status, 1990–2019	Excluded	Irrelevant article
136	Travelers visiting friends and relatives (VFR) and imported infectious disease: Travelers, immigrants or both? A comparative analysis	Excluded	Irrelevant article
137	Imported and autochthonous leprosy presenting in Madrid (1989–2015): A case series and review of the literature	Excluded	Irrelevant article
138	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: A hospital based study	Excluded	Irrelevant article
139	Pathophysiology of Hepatitis C and HIV Coinfection	Excluded	Irrelevant article
140	Transfusion-associated viral infections	Excluded	Irrelevant article
141	Holiday haemodialysis and imported hepatitis C virus infection: A series of sixteen cases in two large haemodialysis units	Excluded	Irrelevant article
142	Qualitative analysis of stochastically perturbed SIRS epidemic model with two viruses	Excluded	Irrelevant article
143	Multimodality Imaging of Common and Uncommon Cystic Focal Liver Lesions	Excluded	Irrelevant article
144	VIRAL HEPATITIS, A THROUGH E, COMPLICATING PREGNANCY	Excluded	Irrelevant article
145	Acute hepatitis E virus infection in a migrant population in North East Italy: A retrospective analysis	Excluded	Irrelevant article
146	An overview of the hepatitis viruses	Excluded	Irrelevant article
147	India	Excluded	Irrelevant article
148	Virological surveillance, molecular phylogeny, and evolutionary dynamics of hepatitis C virus subtypes 1a and 4a isolates in patients from Saudi Arabia	Excluded	Irrelevant article

149	Molecular study of HCV detection, genotypes and their routes of transmission in North West Frontier Province, Pakistan	Excluded	Irrelevant article
150	ACOG Educational Bulletin: Viral Hepatitis in Pregnancy	Excluded	Irrelevant article
151	Clinicopathologic Course of Hepatitis B Infection in Surface Antigen Carriers Following Living-Related Renal Transplantation	Excluded	Irrelevant article
152	Association of genotypes with viral load and biochemical markers in HCV-infected Sindhi patients	Excluded	Irrelevant article
153	Biología de los virus de la hepatitis	Excluded	Language
154	Delta hepatitis: an update	Excluded	Irrelevant article
155	SEROLOGIC DIAGNOSIS OF VIRAL HEPATITIS	Excluded	Irrelevant article
156	Gastroenterological emergencies in the tropics	Excluded	Irrelevant article
157	Viral exanthems	Excluded	Irrelevant article
158	Undifferentiated tropical febrile illness in Cordoba, Colombia: Not everything is dengue	Excluded	Irrelevant article
159	IMMUNOLOGIC ASSESSMENT OF INFECTIOUS DISEASES	Excluded	Irrelevant article
160	Clinical and biochemical diagnosis of jaundice	Excluded	Irrelevant article
161	Viral hepatitis	Excluded	Irrelevant article
162	HEPATITIS E	Excluded	Irrelevant article
163	THE PREGNANT TRAVELER	Excluded	Irrelevant article
164	Evaluation of 24-hour gastric acidity in patients with hepatic cirrhosis	Excluded	Irrelevant article
165	Enzyme immunoassay for the detection of antibody to hepatitis E virus based on synthetic peptides	Excluded	Irrelevant article
166	HEPATITIS C VIRUS INFECTION	Excluded	Irrelevant article
167	Hepatitis E virus (HEV): Molecular cloning and sequencing of the full-length viral genome	Excluded	Irrelevant article
168	Immunological characterization of a viral agent involved in epidemic and sporadic non-A,non-B hepatitis	Excluded	Irrelevant article
169	The discovery of the hepatitis viruses	Excluded	Irrelevant article
170	Liver Disease in Pregnancy	Excluded	Irrelevant article
171	Virus Infection of Polarized Epithelial Cells	Excluded	Irrelevant article
172	Prior hepatitis A virus infection enhances acute hepatitis E virus infection	Excluded	Irrelevant article
173	Recent developments in viral hepatitis	Excluded	Irrelevant article
174	FULMINANT VIRAL HEPATITIS	Excluded	Irrelevant article
175	UPDATE ON VIRAL HEPATITIS IN CHILDREN	Excluded	Irrelevant article
176	Acute hepatitis B infection in Aboriginal Australians	Excluded	Irrelevant article
177	Current and future challenges in quality assurance in molecular diagnostics	Excluded	Irrelevant article
178	FULMINANT HEPATIC FAILURE	Excluded	Irrelevant article
179	Hazards of hepatitis at the Hajj	Excluded	Irrelevant article
180	Measles-derived vaccines to prevent emerging viral diseases	Excluded	Irrelevant article
181	Acute and chronic hepatitis	Excluded	Irrelevant article
182	New Therapeutic Aspects in Fulminant Hepatic Failure	Excluded	Irrelevant article
183	Prevalence of hepatitis D virus infection among hepatitis B virus-infected individuals in India	Excluded	Studies out of scope
184	Viral hepatitis in India	Excluded	Irrelevant article
185	Prevalence of Hepatitis B & D Coinfection in Acute Active Viral Hepatitis in A Tertiary Care Hospital	Included	
186	Prevalence of Hepatitis D virus antibodies in Hepatitis B patients treated at tertiary care unit at Jabalpur Central India	Included	
187	Delta-hepatitis	Included	
188	Prevalence of hepatitis delta virus infection among hepatitis b virus surface antigen positive patients circulating in the largest province of pakistan	Excluded	Irrelevant article
189	Prevalence of hepatitis A, B, C & D in Ludhiana	Excluded	Irrelevant article
190	Prevalence of Hepatitis Delta Virus Infection among Hepatitis B Virus-Infected and Exposed Patients	Included	
191	Prevalence of hepatitis viruses among chronic renal failure patients on hemodialysis in central India	Included	
192	Epidemiology of endemic viral hepatitis in an urban area of India: a retrospective community study in Alwar	Excluded	Irrelevant article
193	Outbreak of viral hepatitis B in a rural community in India linked to inadequately sterilized needles and syringes	Excluded	Irrelevant article
194	Prevalence of hepatitis viruses among multi-transfused homogenous thalassaemia patients	Excluded	Excluded due to incomplete data
195	Prevalence of parenterally transmitted hepatitis viruses in clinically diagnosed cases of hepatitis	Included	
196	Profile of Hepatitis B Virus, Hepatitis C Virus, Hepatitis D Virus and Human Immunodeficiency Virus Infections in Hemodialysis Patients of a Tertiary Care Hospital in Uttarakhand	Included	
197	Role of molecular techniques in the detection of HBV DNA & HCV RNA among renal transplant recipients in India	Included	
198	Prevalence of anti-delta antibodies in central India	Excluded	Irrelevant article
199	Serologic markers with fulminant hepatitis in persons positive for hepatitis B surface antigen. A worldwide epidemiologic and clinical survey	Excluded	Irrelevant article
200	Serological profiles for HBV, HDV, HIV-1 and HTLV-1 in Saudi patients with a malignancy	Excluded	Irrelevant article
201	SEROEPIDEMIOLOGICAL PREVALENCE OF HEPATITIS-DELTA VIRUS IN EASTERN SAUDI-ARABIA	Excluded	Irrelevant article
202	Seroprevalence of hepatitis D virus in patients with hepatitis B virus-related liver diseases	Included	
203	Hepatitis B, C & D viral markers in multitransfused thalassaemic children: long-term complications and present management	Excluded	Irrelevant article
204	Seroepidemiology of hepatitis delta virus infection in Pune, India	Included	
205	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	Included	
206	Status of hepatitis viral markers in patients with acute and chronic liver diseases in northern India	Included	
207	Low prevalence of hepatitis D (delta) virus infection in a nephrology unit in south India	Excluded	Excluded due to incomplete data
208	Delta hepatitis infection in northeast India	Excluded	Inaccessible full text
209	Superoxide dismutase and total anti-oxidant levels in various forms of liver	Excluded	Excluded due to incomplete data
210	Chronic hepatitis in a large Indian hospital	Excluded	Irrelevant article
211	Fulminant hepatitis in a tropical population: clinical course, cause, and early predictors of outcome	Excluded	Irrelevant article
212	Transfusion-transmitted virus in association with hepatitis A-E viral infections in various forms of liver diseases in India	Excluded	Excluded due to incomplete data

Murhekar MV, et al., https://doi.org/10.1016/j.trstmh.2004.10.002 2005	1	1	1	1	1	1	1	1	1	9
Banker DD, et al., 1440825 1992	1	1	1	1	1	1	1	1	1	9
Saravanan S, et al., 10.1177/2325957413488166 2014	1	0	1	1	1	1	1	1	1	8
Thomas PP, et al., 1781001 1991	1	0	1	1	1	1	1	1	1	8
Rajani M and Jais M 10.4103/0974-777X.138502 2014	1	0	0	0	1	1	1	1	1	6
Patel FM and 27748305 Goswami PN 2016	1	0	1	1	1	1	1	1	1	8
Amarapurkar DN, et 1551704 al., 1992	1	1	1	1	1	1	1	1	1	9
Jain P, et al., 2013 10.4103/0255-0857.115631	1	1	1	0	0	1	1	1	1	7
Regmi K, et al., 2017 29453472	1	1	0	0	0	1	1	1	1	6
Sonkar A, et al., 2021 10.1016/j.ijmm.2021.11.003	1	0	1	1	1	1	1	1	1	8
Ramachandran K, et 33888957 al., 2020	1	0	1	0	1	1	1	1	1	7
Jaiswal SB et al., 2001 https://www.researchgate.net/publication/285704937_Prevalence_of_hepatitis_viruses_among_chronic_renal_failure_patients_on_haemodialysis_in_Central_India	1	1	1	1	0	1	1	1	1	8
Arora DR, et al., 2005 10.4103/0255-0857.13873	1	0	0	1	0	1	1	1	1	6
Mittal G, et al., 2013 https://doi.org/10.1016/j.jceh.2013.02.003	1	0	0	0	0	1	1	1	1	5
Radhakrishnan S, et 10969488 al., 2000	1	0	0	1	0	1	1	1	1	6
Anbazhagan GK, et 21160955 al., 2010	1	1	1	0	1	1	1	1	1	8
Chakraborty P, et al., 16251784 2005	1	1	1	0	1	1	1	1	1	8
Saravanan S, et al., 18556033 2008	1	1	1	1	1	1	1	1	1	9
Irshad M and 10.1159/000150404 Acharya SK. 1994	1	1	1	1	0	1	1	1	1	8

Supplementary Table 4 Data extraction summary of included studies

Serial No.	Article Title	Author	Year of publication	Country	YEAR	Positive	Total sample tested	(%)
1	A Hospital-based Retrospective Study on Frequency and Distribution of Viral Hepatitis	Antony J and Celine T, 2014	2014	INDIA	2014	0	818	0.00
2	A STUDY OF HEPATITIS-DELTA VIRUS-INFECTION IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASE FROM NORTHERN INDIA	Singh V, et al., 1995	1995	northern India	1989 to 1993	29	204	14.22
3	Aetiology, clinical course and outcome of sporadic acute viral hepatitis in pregnancy	Khuroo MS and Kamili S. 2003	2003	Kashmir	1993 -1996	6	413	1.45
4	An epidemic of hepatitis D in the foothills of the Himalayas in south Kashmir	Khuroo MS et al., 1998	1998	INDIA	1988	22	24	91.67
5	Clinicoepidemiological characteristics of viral hepatitis in migrants and travellers of the +Redivi network	Henriquez-Camacho C, et al., 2019	2019		2009-17	15	675	2.22
6	Delta virus infection in cirrhotics in a north Indian hospital.	Gupta P, et al., 1993	1993			4	40	10.00
7	Delta virus infections in and around Chandigarh, northern India: evidence for endemicity	Pal SR and Prasad SR 1987	1987	INDIA	1987	11	81	13.50
8	Frequency and clinical profile of precore and surface hepatitis B mutants in Asian-Indian patients with chronic liver disease	Guptan RC, et al., 1996	1996	INDIA	1996	31	120	25.83
9	Frequency of hepatitis B, C and D and human immunodeficiency virus infections in multi-transfused thalasseemics	Amarapurkar DN et al., 1992	1992	INDIA	1992	9	18	50.00
10	Hepatitis B and delta viruses in fulminant hepatitis	Desai Pand Banker DD 1990	1990		1990	20	32	62.50
11	Hepatitis D infectivity profile among hepatitis B infected hospitalised patients in Calcutta	Bhattacharyya S, et al., 1998	1998	INDIA	1998	2	60	3.33
12	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India	Murhekar MV, et al., 2005	2005	India	2005	8	170	4.71
13	Hepatitis delta virus infection in Bombay	Banker DD, et al., 1992	1992	INDIA	1985-89	124	331	37.46

14	High prevalence of hepatitis delta virus among patients with chronic hepatitis B virus infection and HIV-1 in an intermediate hepatitis B virus endemic region	Saravanan S, et al., 2014	2014	INDIA	2014	22	450	4.89
15	LOW PREVALENCE OF HEPATITIS-D (DELTA) VIRUS-INFECTION IN A NEPHROLOGY UNIT IN SOUTH-INDIA	Thomas PP, et al., 1991	1991	INDIA	1991	0	150	0.00
16	Magnitude and pattern of hepatitis B infection in clinically suspected infectious hepatitis at a tertiary care hospital in urban India	Rajani M and Jais M 2014	2014	INDIA	2014	4	24	16.67
17	Presence of acute hepatitis D infection in HBsAg positive cancer patients: A preliminary study from west Gujarat	Patel FM and Goswami PN 2016	2016	India (Gujarat)	-	0	150	0.00
18	Prevalence of delta virus infection in high risk population and hepatitis B virus related liver diseases	Amarapurkar DN, et al., 1992	1992	INDIA	1992	1	120	0.83
19	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: a hospital based study	Jain P, et al., 2013	2013	INDIA	2013	34	267	12.73
20	Prevalence of Hepatitis D Among Patients with Hepatitis B Viral Infection Attending a Tertiary Care Centre of Nepal	Regmi K, et al., 2017	2017	Nepal	2017	0	40	0.00
21	Prevalence of Hepatitis D virus antibodies in Hepatitis B patients treated at tertiary care unit at Jabalpur Central India	Sonkar A, et al., 2021	2021	india	2018-19	8	372	2.15
22	Prevalence of Hepatitis Delta Virus Infection among Hepatitis B Virus-Infected and Exposed Patients	Ramachandran K, et al., 2020	2020	India	2018	1	120	0.83
23	Prevalence of hepatitis viruses among chronic renal failure patients on hemodialysis in central India	Jaiswal SB et al., 2001	2001		1992-2000	1	102	0.98
24	Prevalence of parenterally transmitted hepatitis viruses in clinically diagnosed cases of hepatitis	Arora DR, et al., 2005	2005	INDIA	2003-04	1	28	3.57
25	Profile of Hepatitis B Virus, Hepatitis C Virus, Hepatitis D Virus and Human Immunodeficiency Virus Infections in Hemodialysis Patients of a Tertiary Care Hospital in Uttarakhand	Mittal G, et al., 2013	2013	INDIA	2013	1	12	8.33
26	Role of molecular techniques in the detection of HBV DNA & HCV RNA among renal transplant recipients in India	Radhakrishnan S, et al., 2000	2000	india	2000	2	13	15.38
27	Seroprevalence of HCV and its co-infection with HBV and HIV among liver disease	Anbazhagan GK, et al., 2010	2010			12	512	2.34
28	Seroprevalence of hepatitis D virus in patients with hepatitis B virus-related liver diseases	Chakraborty P, et al., 2005	2005	India (New Delhi)	-	26	123	21.14
29	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	Saravanan S, et al., 2008	2008	India (Chennai)	2008	18	153	11.76
30	Status of hepatitis viral markers in patients with acute and chronic liver diseases in northern India	Irshad M and Acharya SK. 1994	1994	INDIA	1994	16	240	6.67

Supplementary Table 5 Subgroup analysis dataset of included studies

Serial No.	Article Title	Author	Year of publication	Country	YEAR	Positive	Total sample tested	(%)	Region	Study Year	Diagnostic Method	Population Type
1	A Hospital-based Retrospective Study on Frequency and Distribution of Viral Hepatitis	Antony J and Celine T, 2014	2014	INDIA	2014	0	818	0.00	Kerala	2005-2010	not specified	hospital-based
2	A STUDY OF HEPATITIS-DELTA VIRUS-INFECTION IN PATIENTS WITH ACUTE AND CHRONIC LIVER-DISEASE FROM NORTHERN INDIA	Singh V, et al., 1995	1995	northern India	1989 to 1993	29	204	14.22	Northern India	1989-1993	anti-HGV antibodies(ELISA)	HBV-positive patients
3	Aetiology, clinical course and outcome of sporadic acute viral hepatitis in pregnancy	Khuroo MS and Kamili S. 2003	2003	Kashmir	1993 -1996	6	413	1.45	Srinagar, Kashmir	1993-1996	ELISA	76 pregnant women and 337 non-pregnant women
4	An epidemic of hepatitis D in the foothills of the	Khuroo MS et al., 1998	1998	INDIA	1988	22	24	91.67	South Kashmir	1982-1983	EIA, Radioimmunoassay	patients with jaundice

	Himalayas in south Kashmir												
5	Seroepidemiology of hepatitis delta virus infection in Pune, India.	V. A. Arankalle et al 1992	1992	INDIA	1992	6	235	2.55	Pune		not mentioned	ELISA	Community & Hospital based
6	Delta virus infection in cirrhotics in a north Indian hospital.	Gupta P, et al.,1993	1993			4	40	10.00	North India		not mentioned	anti-delta antibodies	HBV-related cirrhosis
7	Delta virus infections in and around Chandigarh, northern India: evidence for endemicity	Pal SR and Prasad SR 1987	1987	INDIA	1987	11	81	13.50	Chandigarh, India	Northern	not mentioned	Delta antigen detection	HBsAg-positive serum,blood donors
8	Frequency and clinical profile of precore and surface hepatitis B mutants in Asian-Indian patients with chronic liver disease	Guptan RC, et al., 1996	1996	INDIA	1996	31	120	25.83	India		not mentioned	anti-delta antibodies	HBV-related cirrhosis
9	Frequency of hepatitis B, C and D and human immunodeficiency virus infections in multi-transfused thalasseemics	Amarapurkar DN et al., 1992	1992	INDIA	1992	9	18	50.00	India		not mentioned	ELISA	thalassemia patients
10	Hepatitis B and delta viruses in fulminant hepatitis	Desai Pand Banker DD 1990	1990		1990	20	32	62.50	Not Mentioned		1985-1989	HBsAg testing,Delta antibody testing	fulminant viral hepatitis
11	Hepatitis D infectivity profile among hepatitis B infected hospitalised patients in Calcutta	Bhattacharyya S, et al., 1998	1998	INDIA	1998	2	60	3.33	Calcutta		1993-1995	ELISA	hospitalized cases of hepatic and non-hepatic disorders
12	Hepatitis delta virus infection among the tribes of the Andaman and Nicobar Islands, India	Murhekar MV, et al., 2005	2005	India	2005	8	170	4.71	Andaman And Nicobar Islands		2004	Hepatitis B Surface Antigen (HBsAg) testing and IgG antibodies against Hepatitis Delta Virus (HDV)	tribes
13	Hepatitis delta virus infection in Bombay	Banker DD, et al., 1992	1992	INDIA	1985-89	124	331	37.46	Bombay		1985-1989	ELISA,RIA,HDAG	acute viral hepatitis,fulminant hepatitis
14	High prevalence of hepatitis delta virus among patients with chronic hepatitis B virus infection and HIV-1 in an intermediate hepatitis B virus endemic region	Saravanan S, et al., 2014	2013	INDIA	2013	22	450	4.89	Chennai, Tamil Nadu,		2003-2005	ELISA	chronic HBV infection
15	LOW PREVALENCE OF HEPATITIS-D (DELTA) VIRUS-INFECTION IN A NEPHROLOGY UNIT IN SOUTH-INDIA	Thomas PP, et al., 1991	1991	INDIA	1991	0	150	0.00	Vellore		1990-1991	ELISA	renal disease
16	Magnitude and pattern of hepatitis B infection in clinically suspected infectious hepatitis at a tertiary care hospital in urban India	Rajani M and Jais M 2014	2014	INDIA	2014	4	24	16.67	New Delhi		2008	ELISA	acute infectious hepatitis
17	Presence of acute hepatitis D infection in HBsAg positive cancer patients: A preliminary study from west Gujarat	Patel FM and Goswami PN 2016	2016	India (Gujarat)	-	0	150	0.00	Gujarat		2013	ELISA	cancer patients
18	Prevalence of delta virus infection in high risk population and hepatitis B virus related liver diseases	Amarapurkar DN, et al., 1992	1992	INDIA	1992	1	120	0.83	Not Mentioned		not mentioned	Anti-delta antibody	high-risk individuals with liver diseases

19	Prevalence of hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus and hepatitis E virus as causes of acute viral hepatitis in North India: a hospital based study	Jain P, et al., 2013	2013	INDIA	2013	34	267	12.73	North India	not mentioned	ELISA	acute viral hepatitis
20	Prevalence of Hepatitis D Among Patients with Hepatitis B Viral Infection Attending a Tertiary Care Centre of Nepal	Regmi K, et al., 2017	2017	Nepal	2017	0	40	0.00	Nepal	2017	HBsAg,HDV IgG,HBcIgM	chronic hepatitis B infection
21	Prevalence of Hepatitis D virus antibodies in Hepatitis B patients treated at tertiary care unit at Jabalpur Central India	Sonkar A, et al.,2021	2021	india	2018-19	8	372	2.15	Jabalpur	2018-2019	ELISA	HBsAg positive samples
22	Prevalence of Hepatitis Delta Virus Infection among Hepatitis B Virus-Infected and Exposed Patients	Ramachandran K, et al., 2020	2020	India	2018	1	120	0.83	India	2018	ELISA	HBV infection
23	Prevalence of hepatitis viruses among chronic renal failure patients on hemodialysis in central India	Jaiswal SB et al.,2001	2001		1992-2000	1	102	0.98	Indore	1992-2000	HBsAg,HBcIgM,	chronic renal failure (CRF)
24	Prevalence of parenterally transmitted hepatitis viruses in clinically diagnosed cases of hepatitis	Arora DR, et al., 2005	2005	INDIA	2003-04	1	28	3.57	Not Mentioned	not mentioned	ELISA	clinically diagnosed cases of viral hepatitis
25	Profile of Hepatitis B Virus, Hepatitis C Virus, Hepatitis D Virus and Human Immunodeficiency Virus Infections in Hemodialysis Patients of a Tertiary Care Hospital in Uttarakhand	Mittal G, et al., 2013	2013	INDIA	2013	1	12	8.33	Uttarakhand	2010-2011	ELISA	hemodialysis
26	Role of molecular techniques in the detection of HBV DNA & HCV RNA among renal transplant recipients in India	Radhakrishnan S, et al., 2000	2000	india	2000	2	13	15.38	Not Mentioned	not mentioned	Anti-HDV antibodies	renal transplant recipients
27	Seroprevalence of HCV and its co-infection with HBV and HIV among liver disease patients	Anbazhagan GK, et al., 2010	2010		2010	12	512	2.34	Tamil Nadu	2007-2008	ELISA	clinically diagnosed liver disease patients AND healthy age and sex-matched controls.
28	Seroprevalence of hepatitis D virus in patients with hepatitis B virus-related liver diseases	Chakraborty P, et al., 2005	2005	India (New Delhi)	-	26	123	21.14	New Delhi	not mentioned	ELISA	HBV-related liver diseases
29	Seroprevalence of hepatitis delta virus infection among subjects with underlying hepatic diseases in Chennai, southern India	Saravanan S, et al., 2008	2008	India (Chennai)	2008	18	153	11.76	Chennai	2002-2004	ELISA	liver diseases

30	Status of hepatitis viral markers in patients with acute and chronic liver diseases in northern India	Irshad M and Acharya SK. 1994	1994	INDIA	1994	16	240	6.67	New Delhi	1989-1992	ELISA	liver diseases
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